

Maryland Historical Trust

Maryland Inventory of Historic Properties number: BA-2858

Name: MD 45 OVER WESTERN RAN

The bridge referenced herein was inventoried by the Maryland State Highway Administration as part of the Historic Bridge Inventory, and SHA provided the Trust with eligibility determinations in February 2001. The Trust accepted the Historic Bridge Inventory on April 3, 2001. The bridge received the following determination of eligibility.

MARYLAND HISTORICAL TRUST	
Eligibility Recommended <u>X</u>	Eligibility Not Recommended _____
Criteria: <u>A</u> <u>B</u> <u>X</u> <u>C</u> <u>D</u> Considerations: <u>A</u> <u>B</u> <u>C</u> <u>D</u> <u>E</u> <u>F</u> <u>G</u> <u>None</u>	
Comments: _____	

Reviewer, OPS: <u>Anne E. Bruder</u>	Date: <u>3 April 2001</u>
Reviewer, NR Program: <u>Peter E. Kurtze</u>	Date: <u>3 April 2001</u>

MARYLAND INVENTORY OF HISTORIC BRIDGES
HISTORIC BRIDGE INVENTORY
MARYLAND STATE HIGHWAY ADMINISTRATION/
MARYLAND HISTORICAL TRUST

MHT No. BA-2858

SHA Bridge No. 3042

Bridge name MD 45 over Western Run

LOCATION:

Street/Road name and number MD 45 (York Road)

City/town Hunt Valley Vicinity X

County Baltimore

This bridge projects over: Road ☐ Railway ☐ Water ☒ Land ☐

Ownership: State ☒ County ☐ Municipal ☐ Other ☐

HISTORIC STATUS:

Is bridge located within a designated historic district? Yes ☐ No ☒

National Register-listed district ☐ National Register-determined-eligible district ☐

Locally-designated district ☐ Other ☐

Name of district _____

BRIDGE TYPE:

Timber Bridge ☐:

Beam Bridge ☐ Truss -Covered ☐ Trestle ☐ Timber-And-Concrete ☐

Stone Arch Bridge ☐

Metal Truss Bridge ☐

Movable Bridge ☐:

Swing ☐ Bascule Single Leaf ☐ Bascule Multiple Leaf ☐
Vertical Lift ☐ Retractable ☐ Pontoon ☐

Metal Girder ☐:

Rolled Girder ☐ Rolled Girder Concrete Encased ☐
Plate Girder ☐ Plate Girder Concrete Encased ☐

Metal Suspension ☐

Metal Arch ☐

Metal Cantilever ☐

Concrete ☒:

Concrete Arch ☒ Concrete Slab ☐ Concrete Beam ☐ Rigid Frame ☐

Other ☐ Type Name _____

DESCRIPTION:**Describe Setting**

Bridge 3042 carries MD 45 (York Road) over Western Run in Baltimore County. MD 45 runs in a generally north-south direction over the eastern flowing Western Run. The bridge is located in a suburban area that is heavily commercialized. The bridge carries 2 lanes of traffic in opposing direction and is located adjacent to the Masonic Home of Maryland. The bridge is located on a sharp vertical crest curve with poor sight distance. This was common in arch bridges, so that floodwaters could sweep around the structure instead of washing the bridge away.

Describe Superstructure and Substructure:

Bridge 3042 is a single span, filled spandrel concrete arch. The bridge replaced a covered bridge in approximately the same location in 1917. The arch is oriented on a 90-degree skew. When originally constructed, the bridge carried a 24-foot clear roadway with two 7-foot lanes. Subsequently widened by 11 feet 6 inches in 1955, the bridge now has a 30-foot roadway width. The length of the bridge is 94 feet, with a clear arch span of 90 feet at the springline. The rise of the arch from springline to crown is 13 feet 7 inches. The reinforced concrete wingwalls have elaborate inscribed paneling on the exterior faces that resembles the appearance of an open spandrel arch. The wingwalls terminate at the end of the arch proper, with wide paneled pilasters. The original arch had 1 foot 6 inch wide vertical concrete parapets with caps and short curbs mounted on a 2 foot 2 inch wide base. The widened side parapet matches the original and both have a rather elaborate paneled interior face. The arch is earthen filled and is topped with a bituminous concrete road section. There is an interior concrete slab over the middle portion of the arch.

According to a 1995 inspection report, the bridge is in fair condition with a sufficiency rating of 62.7.

Discuss major Alterations:

The bridge was widened in 1955.

HISTORY:

WHEN was bridge built (actual date or date range) 1917, 1955

This date is: Actual Estimated

Source of date: Plaque Design plans County bridge files/inspection form X

Other (specify)

WHY was bridge built? Relocation and geometric improvements to York Road and replacement of nineteenth-century covered bridge.

WHO was the designer Unknown

WHO was the builder State Roads Commission

WHY was bridge altered? To widen the structure for a wider approach roadway.

Was bridge built as part of organized bridge-building campaign?

Yes, this bridge was built as part of the geometric improvements to York Road.

SURVEYOR/HISTORIAN ANALYSIS:

This bridge may have National Register significance for its association with:

A - Events X B- Person

C- Engineering/architectural character X

The bridge was determined eligible by the Interagency Review Committee in September 1996.

Was bridge constructed in response to significant events in Maryland or local history?

The improvement of Baltimore County roads and structure most likely resulted from several events that occurred at the start of the twentieth century. The original Good Roads movement was aimed toward improving the primary routes throughout the state, of which York Road can be classified, as well as connecting roads between counties. A later

impact of this program included the widening, geometric improvements, regrading of highways, and the construction of new bridges to carry the rebuilt roadways. The rapid increase of motorized vehicles prompted the replacement of existing narrow and weak bridges with wider and stronger structures. The removal of the nineteenth-century timber structure at this location, and its replacement with a concrete arch, demonstrates this practice.

When the bridge was built and/or given a major alteration, did it have a significant impact on the growth & development of the area?

Yes, Bridge 3042 was built as part of the improvements to York Road. Although there had been an existing roadway connecting Baltimore with York, Pennsylvania since 1810, when the Yorktown turnpike was completed, the redesigned modern highway allowed for increased traffic loads and included the features of modern geometric design, allowing both greater speed and safety to the motorist. The associated increase in traffic after the highway was completed allowed for greater regional development, both within the state and in the commercial centers of eastern Pennsylvania. Subsequently, the widening of this structure also had a later impact on the region as York Road was improved to handle increased in traffic volume, vehicular loadings, and the overall increase in people relocating from Baltimore City and southern Pennsylvania to Baltimore County in the post-World War II period.

Is the bridge located in an area that may be eligible for historic designation?

No, this bridge is not located in an area that is eligible for historic designation.

Is the bridge a significant example of its type?

Yes, Bridge 3042 is a significant example of a widened, relatively undeteriorated single span concrete arch bridge built in 1917.

Does bridge retain integrity of important elements described in Context Addendum?

Yes, the bridge retains the integrity of its character defining elements; however, it was widened, causing the loss of one part of its original solid parapet. Although minor repairs were made to the bridge, the large majority of features of the bridge are original and have little deterioration, including the barrel, arch ring, spandrel walls, abutments, and wingwalls.

Is bridge a significant example of work of manufacturer, designer and/or engineer?

Yes, this bridge is a significant example of the structural design and construction work of the State Roads Commission in 1917 to eliminate deficient and dangerous geometric alignments of its highways to meet the demands of modern motorists, and create beautiful structures that could withstand the associated higher loads of modern motorized vehicles.

Should bridge be given further study before significance analysis is made?

No, the bridge should not be given further study.

BIBLIOGRAPHY:

County inspection/bridge files ___ SHA inspection/bridge files X Other (list):

SURVEYOR/SURVEY INFORMATION:

Date bridge recorded August 23, 1996

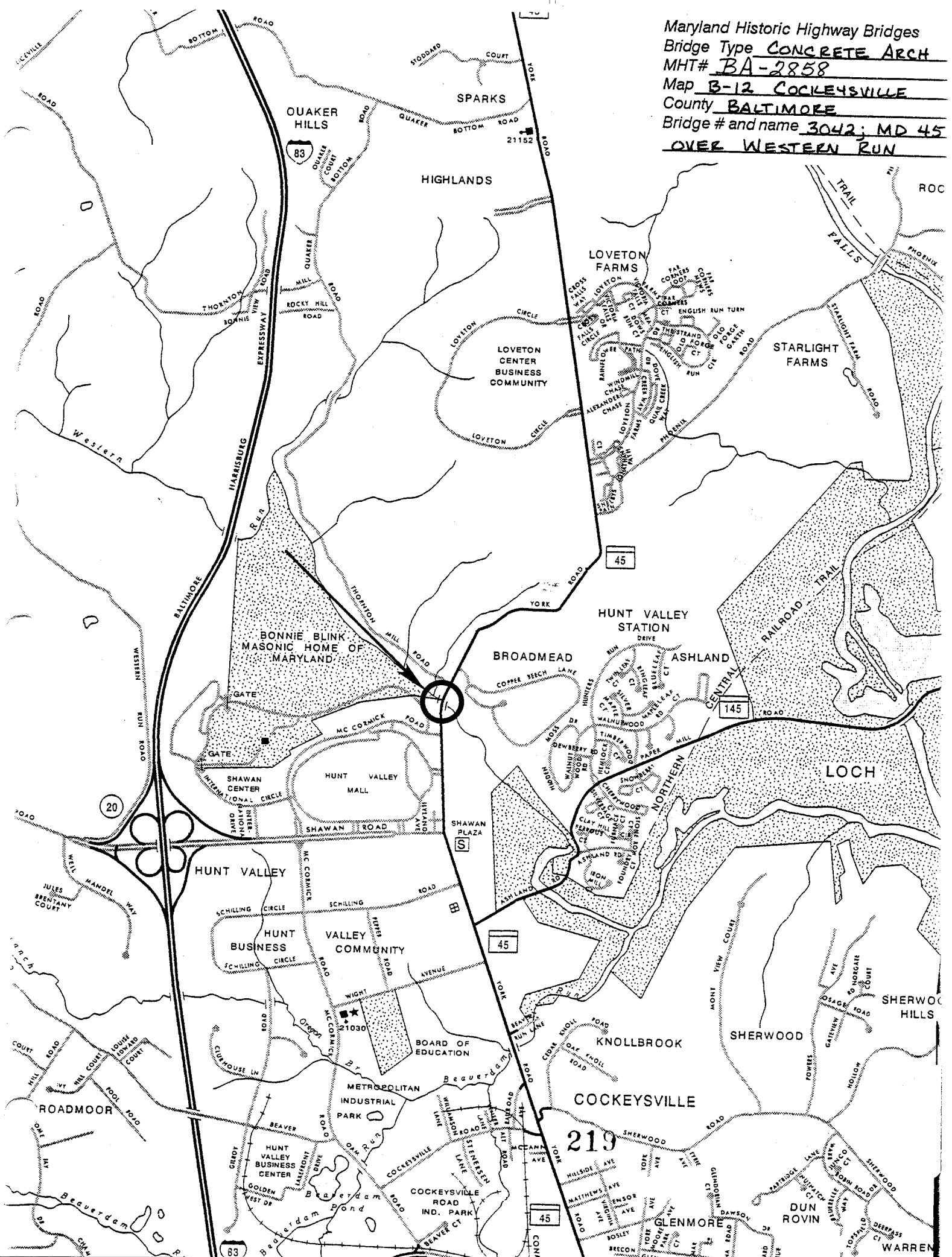
Name of surveyor James T. Aguirre

Organization/Address State Highway Administration, 707 North Calvert Street, Baltimore, MD

Phone number 410-545-8559

Edited by P.A.C. Spero & Company, December 1997

Maryland Historic Highway Bridges
Bridge Type CONCRETE ARCH
MHT# BA-2858
Map B-12 COCKEYSVILLE
County BALTIMORE
Bridge # and name 3042; MD 45
OVER WESTERN RUN





Inventory # BA-2858

Name 3042- MD 45 OVER WESTERN RUN

County/State BALTIMORE COUNTY/MD

Name of Photographer DAVE DIEHL

Date 1/95

Location of Negative SHA

Description WEST APPROACH LOOKING
SOUTH

Number 1 25 of 34 ⁴



Inventory # BA-2858

Name 3042 MD 45 OVER WESTERN RUN

County/State BALTIMORE COUNTY/MD

Name of Photographer PAVE DIEHL

Date 1/95

Location of Negative SHA

Description EAST ELEVATION LOOKING
WEST

Number 2 of 34



Inventory # BA-2858

Name 3042- MD 45 OVER WESTERN RUN

County/State BALTIMORE COUNTY/MD

Name of Photographer DAVE DIEHL

Date 1/95

Location of Negative SHA

Description WEST ELEVATION LOOKING

SOUTHEAST

Number 3 of 34



Inventory # BA-2858

Name 3042-MO45 OVER WESTERN RUN

County/State BALTIMORE COUNTY/MD

Name of Photographer DAVE DIEHL

Date 1/95

Location of Negative SHA

Description SOUTH APPROACH LOOKING
NORTH

Number 4 ~~28~~ of ~~24~~ 4